

Technical Specifications of Road Mobile Restoration Vehicle (RMRV)**DESCRIPTION OF WORK:**

Supply of 02 No's turbo charged truck (Cowl chassis) and Fabrication, furnishing and installation / Mounting of Bus body on max 32 feet length COWL & Chassis for Road Mobile Restoration Vehicle (RMRV)/ Road ART.

Description of chassis:

Model TATA LPT 1923, Ashok Leyland 1920, or similar. Gross vehicle weight min 18500 Kg or higher, pay load min 10000kg and Overall length not exceeding to 32 feet.

Specification:

- GVW : 18500 Kg
- Engine : Diesel operated
- Power : Min 180 HP or higher
- Axle : 4 x 2
- Variant : Cowl with Chassis, AC /Non AC
- Body length : Not exceeding 32 feet (maximum overall / full length)
- Frame : Ladder type heavy duty frame
- Tyres : Radial tyres tube 295/90R20 or similar
- Variant : BS VI
- Fuel tank : Twin tank More than 300 litters with Anti Fuel Theft facility.
- Transmission : Forward + Reverser
- Suspension : Company fitted / Air suspension or latest upgraded.
- Reverse parking assistant system

DETAILED SCOPE OF WORK

Name of Work: Fabrication, furnishing and installation / Mounting of Bus body on Max 32 feet Extended length of COWL & Chassis for Road Mobile Restoration Vehicle (RMRV)/ Road ART.

Fabrication furnishing and installation / mounting of Bus body of following item as per following specification & attached drawing). Entire work of Fabrication furnishing and installation / mounting of Bus

सीनियर इंजीनियर (कै. एवं वै.)
Senior Section Engineer (C & V)
उ.प्र.सी. / एस.टी.एस.आर.सी., वृ.पु.म., बिलासपुर
S.E.C. Railway, Bilaspur

मंडल यांत्रिक इंजीनियर (फ्रेट)
Sr. Divi. Mech. Engineer (Freight)
वृ.पु.म., बिलासपुर
S.E.C. Railway, Bilaspur

2470179/2026/O/o Sr DMM/BSP/SECR

body including paint work should be in-line with the references. (photos are attached for ready reference / understanding purpose)

Sr. No.	Description	
1.	Window	Aluminium sliding windows (top fix both sliding) of MAZDA section no.5074 fitted with 5 mm thick clear toughened glass directly mounted or in 1" thick EDPM rubber profiles Windows arrangement. Five no's window suitable on Driver side panel and two no's at left panel Excluding Driver Cabin provision as per drg No. BSP/MECH/RMRV/01/26 accident relief road vehicle. (Window arrangement should be for passengers & driver compartment only) Emergency window should be provided as per norms of RTO.
2.	Under frame	Cross bearers ISMC 150 X 50 mm MS Rolled channel supported with "U" bolts and balata packing 12 mm thick. Base plate minimum 4 mm thick MS.
3.	Flooring	Floor 40x40x4mm thick angle. Flooring in staff seating & rear storage compartment of 12 mm thick Chequered Compare Plywood hole body floor. Over plywood 2mm Aluminium Chequered plate in staff seating compartment and SS 1.6mm in rear storage compartment.
4.	Structure	Super structure will be 14G galvanized sections. Skirt rail & flooring rails are made with MS angle 30x30x3 mm thick; Seat rail & pillar is made with MS angle 40 X 40 X 4mm thick; Necessary supports for mounting of various equipment's shall be provided with suitable plates.
5.	Panelling	Exterior panels shall be GI 20 SWG thick sheet Pop riveted and interior panels shall be of ACP (aluminium Composite Panel 20 SWG). Exterior & Interior roof panelling shall be of GI 20 SWG. All joints should with aluminium overlap beading.
6.	Cabin & Seating area panelling and insulation	As per Sr. no. 5 with 1 ½ "I thick thermocol insulation in roof and side.
7.	Luggage area panelling	0.90 mm good quality colour-coated sheets on roof and sides.
8.	Doors	Driver door, co-driver door, one door in Passenger compartment emergency door / window. compartment should be flap type opening. All doors to be fitted with good quality locks, heavy-duty forged hinges and handles/hand rails. The rear door should be of shutter-type with provision of folding foot rest.

07/05/24

वर्षाद्वारा
Sr. Div. Mech. Engineer (Freight)
द. पू. मध्य रेलवे, बिलासपुर
S.E.C. Page 2 of 7

9.	Seats	Fixed-co-driver Seat and crosswise storage cum box type seat behind driver seat with upper sleeping berth. 18 Nos. of seat (Including driver cabin and staff compartment) front facing storage cum box seats of size 30"x 15" in 15 G, 1 "dia. Pipe structure with 1.2 mm GI sheet panelling with provision of hand rest and top opening & locking arrangements. Cushion thickness 4" inch coir foam of suitable brand covered with Rexene and suitable cloth. Seating arrangement as per Drg: BSP/MECH/RMRV/01/26 accident relief road vehicle.
10.	Storage Racks. arrangement in rear compartment	In rear compartments arrangements of racks fabricated in 40 x 40 x 4 mm MS (rolled section) and welded to interior pillar support and panelled with 1.6 mm thick MS sheet, provision of clamps for 2nos. oxygen and LPG cylinders and HRE material.
11.	Hat racks in staff compartment	Provision of hat racks $\frac{3}{4}$ "Aluminium tubular at 350 mm height should be provided at LH side with suitable brackets.
12.	Dickeys	Provision 1.6 mm thick GI sheet of box type dickeys for storage of wooden packing with flap door and locking arrangement at LH & RH side. Provision 2.5 mm thick GI sheet flooring with 30 x 30 x 30 mm thick MS angle structure of Box Type dickey with both side flap door and locking and securing arrangement at rear end below the under frame for keeping re-railing bridge. Arrangement as per Drg. BSP/MECH/RMRV/01/26 accident relief road vehicle.
13.	Electric fittings	Adequate roof lighting preferably LED panels in driver's cabin, staff cabin and rear compartment with flame proof wiring in PVC sleeves including all switches with control panel at driver's side, provision of fan in driver & staff cabin. There should be multiple mobile charging sockets (preferably USB type) for mobile / Walky-Talky charger point. Inverter base plug point for mobile / laptop charger 24 V. DC/ 230 V. AC. (provision of 6 nos. 8 / 12 W LED panel lights on roof, one 12 W LED lamp in Driver's cab, stop lights on each end, indicator lights, one step light for ladder at rear end.)
14.	Partition	Full partition of box section with 1.6 mm thick GI sheet behind longitude seat of driver cabin & with provision of Aluminium Diamond mesh grill for communication with crew.
15.	Misc.	Luggage carrier on roof with ladder, Driver cabin windscreen glass, Roof lamps. - 4 Nos. Tail lamps, Number plate lamps, Sun visors, Rear view mirror, Mud flaps, Rear bumper Electrical & RTO fitments, as applicable etc. shall be provided.

सीनियर सेक्शन इंजीनियर (कै. एवं स.)
Senior Section Engineer (C & V.)
प. आर. म. व. स. ई. सी. आर. बी.
P.A.R.M.V. S.E.C.R. Bil.

वरिष्ठ इंजीनियर (मैक.)
Sr. Division Engineer (Mech.)
ड. ए. ए. ए. सी. आर. बी.
S.E.C. Railway, Bilaspur

16.	Painting & Lettering	Bright Metallic painting (preferably orange / red / white / blue colour combination) of full vehicle in best quality automotive shade as per relevant IS specification, the paint used shall be of reputed manufactures like M/s BERGER, Nerolac, Asian paints,. Both Side exterior panel to be written as " RMRV (Road Mobile Restoration Vehicle), BSP Division" SOUTH EAST CENTRAL RAILWAY , In retro reflective colour with letter size 8" on. Front and both side. Coloured background strap of width 10" and 3" wide strips of white and red retro reflective tape material. Govt. of India sticker and Name in retro reflective colour on Front and both side.
17	Emergency Light / Siren	One revolving Ambar light on top and siren at front facing suitable location should be mounted.

Term & condition:

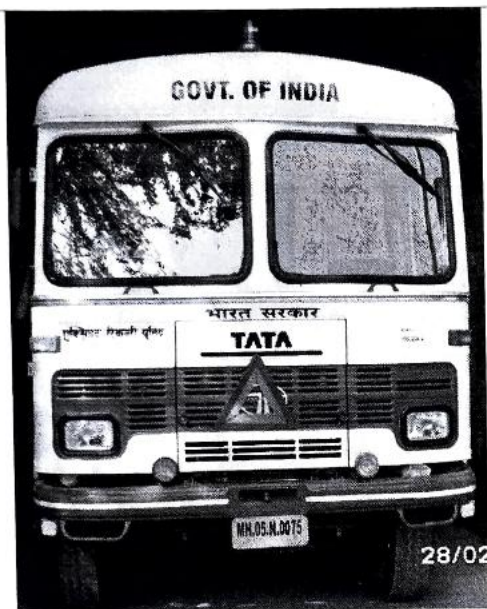
- 1) Contractor should be fully responsible for supply of correct COWL – Chassis and Fabrication, furnishing and installation / Mounting of Bus body as per RTO norms and successfully passing/registration from concern RTO circle. Permanent RTO Vehicle registration/passing applied document to be provided at the time of Commissioning. Permanent RC to be done in name of SSE/C&W/BCN/BSP.
- 2) The entire work including supply of chassis and installation of bus body shall be completed within 90 Days.
- 3) 1st servicing as in term of Periodic cum KM earning as per OEM service manual, which is earlier should be conducted by the contractor free of cost.
- 4) The design of the complete system and execution including fabrication, furnishing and installation / mounting of bus on cowl chassis will be carried out as per specification and drawing. This may change as per railway requirement.
- 5) Attached drawing is tentative, Final drawing will be submitted by Contractor. Contractor will get final approval of lay out plan/drawing for complete system from Sr.DME/BSP/SECR.
- 6) Railway Competent authority i.e. Sr.DME/BSP only have full power to make any changes after intermediate inspection if any OR he may terminate the contract at any time without showing any reason. Nominated representative of Sr.DME/BSP shall be inspecting authority.
- 7) 1ST Year Insurance to be provided by the Firm.
- 8) Warranty – as per latest IRS condition.
- 9) Consumables spare excluded engine oil, including to all filters and urea should be included for 2 year's service schedule.
- 10) PAYMENT TERMS:
 - a) 100 % payment to contractor will be made after successful commissioning at site of Complete bus (Completion of entire fabrication furnishing and installation /mounting of bus body on supplied COWL and Chassis and RTO registration /passing).
 - b) Price shall also include transportation of the Road ART from contractor's work site to Bilaspur, Chhattisgarh after satisfactory completion of work.
 - c) Tenderer shall attend and rectify any failures occurring during this period and shall replace damaged /cracked /breakage of system parts free of cost within a week time after receiving the call from consignee /Railways.

सीनियर सेक्शन इंजीनियर (फ्रेट)
Senior Section Engineer (C & W)
सी.एस.ए.आर.एन.बी., द.पू.म.रे, बिलासपुर
S.E.C.R.M.V. S.E.C.R., Bilaspur

वरिष्ठ सहायक संचालक इंजीनियर (फ्रेट)
Sr. Deputy Engineer (Freight)
द.पू.म.रे, बिलासपुर
S.E.C. Railway, Bilaspur

Photographs of Road ART for Reference / Understanding Purpose

Side Profile of Vehicle




Front View




Rear View



Seating Arrangement


 सीनियर सेक्शन इंजीनियर (कै. एवं व.)
 Senior Section Engineer (C & V),
 द. म. रेलवे, सी.ए. आर.ए.डी., द.पु.म.रे., बिलासपुर
 S.E.C.R., Bilaspur


 वरिष्ठ विद्युत् यंत्रिक इंजीनियर (फ्रेट)
 Sr. Dist. Mech. Engineer (Freight)
 page 5 of 5 द. म. रेलवे, बिलासपुर
 S.E.C. Railway Bilaspur



Driver Cabin



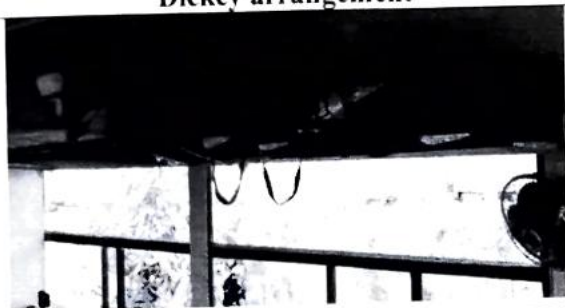
Material Storage on Roof



Dickey arrangement



Luggage Storage Arrangement



Luggage Storage Arrangement (Hat Rack)



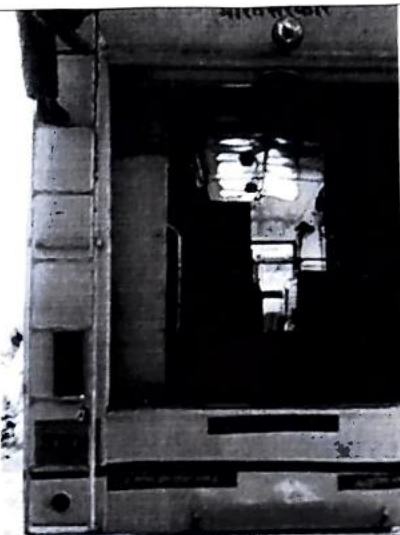
Material Storage under seat



Luggage Storage Compartment



Gas Cutting equipments

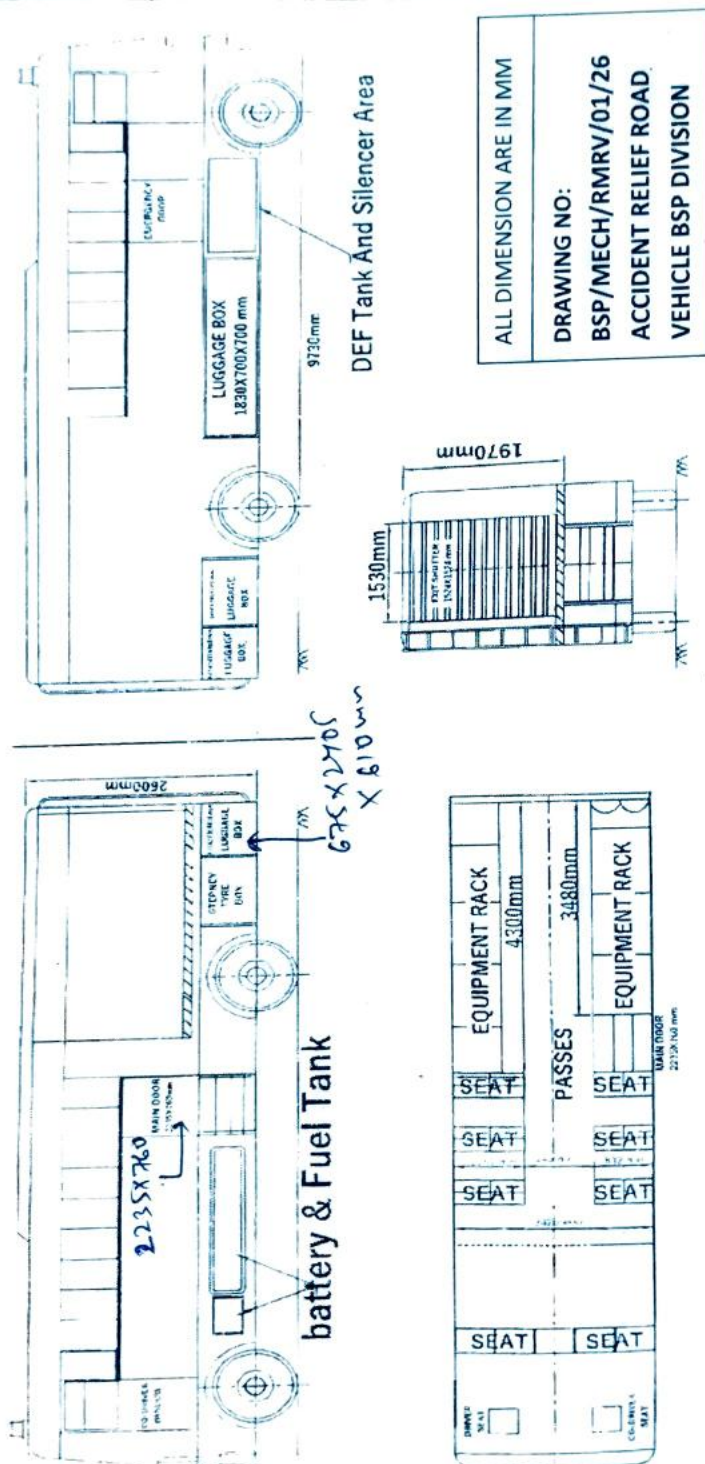


Ladder arrangement

सौजन्य से
 Section Engineer (C & W)
 77.02/1994/आर.न.सी. ट.पु.म.रे. बिलासपुर
 S.E.C. Railway, Bilaspur

page 6 of 7
 Sr. Divl. Mech. Engineer (Freight)
 द. पू. मध्य रेलवे, बिलासपुर
 S.E.C. Railway, Bilaspur

DRAWING FOR THE RMRV/BSP DIV/SECR



वरिष्ठ मंडल यांत्रिक इंजीनियर (फ्रेण्ट)
Sr. Divl. Mech. Engineer (Front)
द. पू. मध्य रेलवे, बिलासपुर
S.E.C. Railway, Bilaspur